

## ABSTRACT

### Improvements Relating to Interfacing Embedded Optical Transmission Structures

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A method of and an apparatus for coupling a first optical transmission means (10,42), such as an optical fibre, embedded within an aircraft composite (12,40) to a second  
10 optical transmission means (14), such as an optical fibre, external to the composite (12,40) is described. The method comprises locating the position of the first optical means (10,42) embedded within the composite (12,40) using X-ray scanning for example; forming a passageway (20,62) by laser machining or drilling within the composite (12,40) to the first optical transmission means (10,42); and establishing an optical connection  
15 between the first and second optical transmission means (10,42,14) at the intersection of the passageway (20,62) and the first optical transmission means (10,42).

(Figure 3b)